THE STATUS OF THE NUTRIA IN FLORIDA¹

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The nutria (*Myocastor coypus*), a South American rodent introduced into the United States, has been the object of considerable contention in the southern and western parts of the country. Well able to acclimate itself in North America, especially in southern marshy areas, this species has raised havoc with aquatic vegetation and farm crops in addition to competing with the muskrat and waterfowl for food. Only a few parasites and predators of the nutria are known. F. C. DuBois, (*in litt.*) reports that occasionally they suffer from screwworms. According to Hodgson (1949) they may be susceptible to coccidiosis, and the young are sometimes killed and eaten by rats. Thus, without any effective natural control these animals have been able to increase their numbers and spread to such an alarming degree in some parts of the United States that efforts, lasting as late as the 1930's, failed, and numerous animals (Presnall, 1957).

Nutria were first introduced into the United States in 1899, when a mature male and three females were imported by Will Frakes of Elizabeth Lake, California (Hodgson, 1949). Other importations were received in western United States during the early 1900's as part of an attempt to establish a nutria fur industry. These early efforts, lasting as late as the 1930's, failed, and numerous animals were released in the wild when breeding became unprofitable. Feral colonies were thus established in western United States.

In the late 1930's E. A. McIlhenny enclosed six pairs of nutria on Avery Island, Louisiana, in an attempt to develop a nutria farm. Within two years some of the animals had managed to escape and establish themselves in the Louisiana marshes (Dozier, 1951). In 1940 a hurricane in this same area washed the remaining nutria (150 animals) off Avery Island. Survivors reaching the mainland added to the existing population, thus giving nutria a firm foothold in Louisiana (Anonymous, 1955). Subsequently the animals multiplied and spread to the lakes, rivers, bayous and marshes of Louisiana until at the present time their population is estimated to be well over one million in that state alone (Sampson, 1957). Impor-

¹ A contribution from The Department of Biology.

tations, releases and immigrations contributed to the spread of nutria to Texas, Georgia, Mississippi and Alabama. In recent years feral nutria have been reported in Florida (Anonymous, 1955).

This study was made in an attempt to assess the present status of nutria in Florida. Since the climate and vegetation of this state appear to be well suited to the growth and reproduction of nutria there is reason to believe that the species may flourish here if it is successful in establishing a foothold. Knowledge of the present status of nutria in the state may be valuable as a basis for analyzing future trends in distribution and population.

Locality	Number of Animals
Alachua County	2 (2)
Gainesville	• •
Dade County	_
Miami*	?
DeSoto County	10
Arcadia*	18
Escambia County	1 1
Pensacola	15
Hillsborough County	4
Tampa* Tampa*	· 4 6 (?)
Plant City*	4
Lake County	Т
Tavares*	4
Lee County	-
Ft. Myers*	?
Manatee County	
Bradenton*	?
Marion County	
Ocala*	6
Ocala*	12
Ocala*	$ \begin{array}{c} 6\\ 12\\ 2\\ 2\\ 2 \end{array} $
Silver Springs	2 (2)
Summerfield	200 (?)
Orange County Orlando*	2
Pasco County	Z
Dade City*	2
Putnam County	2
East Palatka*	50 (1)
Sarasota County	
Sarasota*	2
Taylor County	·
Perry	;

Table 1. Distribution of Nutria Farms in Florida.

? Exact numbers unknown.

() Indicates the number of escapees.

* Indicates membership in a nutria ranching association.

Information on nutria in Florida has been obtained from several sources. Various officials of the Florida Game and Fresh Water Fish Commission have provided information on apparently feral nutria caught by professional trappers and sight records reported by game wardens. The nutria ranching associations in the state have been very cooperative by providing the locations of nutria farms and the number of animals kept by the individual owners. Some information was obtained from newspapers which have given the nutria considerable publicity in recent months. Specimens in the University of Florida mammal collection provided additional records.

Reports of nutria in Florida consist of purposely released animals, feral nutria, i.e., animals which have no known origin in the state, farm raised animals and nutria which have managed to escape from farms. Nutria have been reported from 26 localities in at least 23 counties in the state. Several communities such as Tampa and Ocala have two and three farms respectively (Table 1). The majority of the farms are at present located in central and west central Florida. The estimated population is between 300 and 500 animals, though this figure may be somewhat conservative since feral nutria populations in northwest Florida may be higher than available information indicates.

FERAL RECORDS

Feral nutria with one exception appear to be restricted at present in the counties along the northwest and west central coasts of Florida (Figure 1).

Seven records considered to be feral nutria have been reported in Florida. These reports indicate feral nutria present at North Choctawhatchee Bay, East Choctawhatchee Bay, the mouth of the Apalachicola River, the mouth of the Suwannee River, Cedar Keys, Otter Spring Run (Gilchrist County), and the Hillsborough River (Figure 1). The record from the Hillsborough River is based on a description of a skin which leaves little doubt that the animal was a nutria. Since the specimen was collected prior to the existence of any nutria farms in the area it is assumed to represent a feral animal. The record from Cedar Keys is a sight record of an animal which fits the description of a nutria. The skeleton of a nutria found at Otter Spring Run, Gilchrist County, is deposited in the University of Florida mammal collection. Whether the skeleton

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represents a feral animal or an escapee is actually unknown, although it seems likely that feral nutria may have reached Gilchrist County in their immigration into Florida, particularly since the nearest nutria ranch is about 40 miles distant. Apparently a small

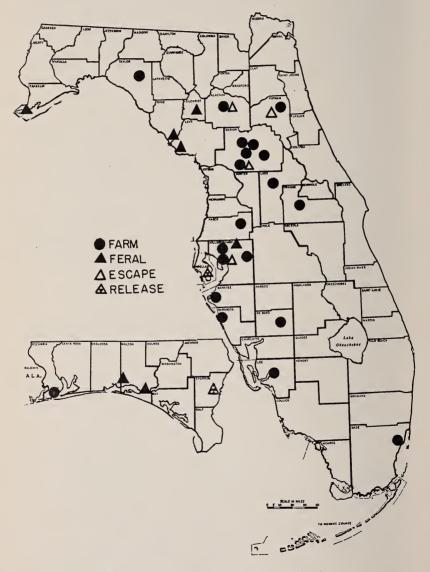


Figure 1. Distribution of nutria in Florida.

population exists in Choctawhatchee Bay since small numbers of nutria have been trapped in that vicinity (E. Timmons, in litt.). The occurrence of nutria on the Apalachicola and Suwannee Rivers is based on reliable reports (E. Timmons, in litt.). The feral records from northwest Florida are most likely animals which have established themselves in the wetlands after wandering from Louisiana to the Mobile Delta of Alabama and rivers of southwest Georgia. The nutria reported from the northwest and west-central regions of Florida (Anonymous, 1955) are unquestionably feral animals since the known nutria release in this area took place in March, 1957. Also, it is improbable that the animals are escapees since the known nutria farms at Pensacola and Perry were not established until recently. With one exception the feral reports are confined to coastal regions in the vicinity of large rivers. Apparently the animals are immigrating southward along the coastline where rivers and marshes are serving as avenues of distribution.

Releases

Organized releases of nutria are known to have taken place at two localities in Florida. At Blountstown a release of four males and eight females was made in March, 1957. The animals were turned loose in Lake Hilda as a measure to control aquatic vegetation which has overgrown the lake. According to E. B. Chamberlain (*in litt.*) a small release of nutria has been made on private land near St. Petersburg. No other information is available but more than likely these animals were stocked in an effort to clear up an overgrown lake. Information provided by A. S. Stephens (*in litt.*) suggests the possibility of a third release somewhere in the state. According to Stephens, a truckload of nutria appeared at East Palatka in June 1957. Apparently some community had purchased the animals for release although the ultimate destination of the shipment was not learned.

NUTRIA FARMS AND ESCAPES

There are at present 20 known nutria ranchers in Florida raising between 300-400 animals. Fifteen of these ranchers belong to some type of nutria ranching association (Table 1). More than likely there are others who could have purchased their stock from out-ofstate sources and therefore are unknown to any of the Florida dis-

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tributors. The 20 ranchers reported in this paper are now actively raising nutria for pelts while there are a considerable number of interested people awaiting delivery of breeding stock. Ranchers who are members of ranching associations are required to keep their animals in escape-proof pens. There are, however, several ranchers who do not belong to any association and therefore raise the animals as they see fit. Generally it is from this type of ranch that animals are known to have escaped. One such farm located at Summerfield now has over 200 animals which have all been raised from a single pair brought into Florida from Michigan five years ago. This gives a good idea of the fecundity of this species. Animals are known to have escaped from ranchers in East Palatka, Gainesville, Tampa, and Summerfield. Two animals which escaped from a Gainesville rancher were killed within a short time after escape. One individual had moved about one mile from the point of escape before it was reported. At East Palatka one female escaped in December, 1956. Though the animal was never seen again its tracks were traced to a point several hundred yards away from the pens. At the Tampa locality escapes have occurred but additional information is lacking. The number of animals escaping from the Summerfield ranch is unknown but several escaped animals have been returned to the rancher by neighbors.

SUMMARY AND CONCLUSIONS

A combination of immigrants, escapees and released nutria appear to have given this exotic mammal a foothold in Florida. Feral records indicate that this species has entered northwest Florida from the region of the Mobile Delta and has immigrated south along the Gulf Coast to at least Levy County and possibly to Hillsborough County. Animals are known to have been purposely stocked at Blountstown and St. Petersburg while escapes from ranches have been reported from East Palatka, Gainesville, Summerfield and Tampa. Of the three major sources of wild nutria in the state. nutria ranches probably are of the greatest potential significance. Thirteen of the 20 nutria farms located in Florida are found in the approximate center of the state where lakes are very numerous and offer excellent habitat for the nutria. At the present time nutria interests in Florida appear to be actively engaged in the sale of breeding stock in an attempt to establish a pelting industry. A large state-wide feral population of this species would be a potential

threat to farm crops and waterfowl. Additional studies on the status of feral nutria and their effects on local ecology in Florida appear necessary.

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